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Before the
Federal Communications Commission
Washington, D.C. 20554

MAY 16 2003

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
Additional Spectrum for Unlicensed Devices) ET Docket No. 02-380
Below 900 MHz and in the 3 GHz Band)

REPLY COMMENTS OF IEEE BROADCAST TECHNOLOGY SOCIETY
IN ET DOCKET NO. 02-380

The IEEE Broadcast Technology Society¹ (IEEE-BTS) hereby offers its reply comments in the above-captioned proceeding.² IEEE-BTS is seriously concerned that allowing unlicensed devices to operate in TV broadcast spectrum has the potential for substantial interference to broadcast reception, and for additional confusion and delay in the transition to digital television as unforeseen sources of interference are encountered.

We noted with interest the comments of the IEEE 802.18 Radio Regulatory Technical Advisory Group in this proceeding, as this group is sponsored by the IEEE Computer Society, one of our sister technical societies. Since the IEEE 802 committee is responsible for standards for wireless networking devices, which require spectrum resources, it is understandable that their position would be one of support for allowing

¹ The Broadcast Technology Society is one of 37 technical societies within the IEEE (Institute of Electrical and Electronics Engineers), which is the world's largest technical professional organization and a leading authority in a broad range of technical areas. The field of interest of our Society encompasses devices, equipment, techniques and systems related to broadcast technology, including the production, distribution, transmission, and propagation aspects. Our membership comprises some 2400 technical professionals within the broadcast industry worldwide.

² This document represents the views of the IEEE-BTS and does not necessarily represent a position of either the IEEE or the IEEE Standards Association.

use of such unlicensed devices within the broadcast television spectrum. However, in reply, we feel obligated to offer the Commission a different point of view based upon our field of interest in broadcast technology and our expertise in spectrum matters.

We also noted with interest the joint comments of MSTV, NAB, and APTS in this proceeding and – most especially – the study, “Exploring the Feasibility of Sharing TV Band Spectrum with Unlicensed RF Devices,” which was attached to that filing. We endorse the Lipoff study³ and its conclusions, and we urge its serious consideration by the Commission.

Based upon a rigorous and well-documented technical analysis of interference potential, Mr. Lipoff concluded that the sharing of TV spectrum during the DTV transition period on the co-channel and adjacent channels will not be possible in any but the most rural areas. As he pointed out, there is little need for additional spectrum for unlicensed devices in such areas. The Lipoff report also concluded that any technical approach requiring factory or user programming to avoid interference to local TV services is fraught with unacceptable technical risks, and that self-configuring geolocation technologies based on GPS are impractical on both technical and economic grounds.

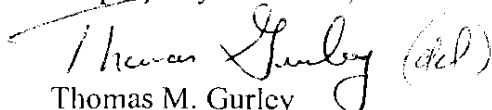
The IEEE-BTS urges the Commission not to consider untested techniques for avoiding interference to broadcast television, especially at this critical juncture in the transition to digital television transmission. Prior to the introduction of any such techniques in the future, a comprehensive program of laboratory and field testing must be undertaken. Such a program must include testing of compatibility of a multiplicity of

³ The author of the study, Stuart J. Lipoff, is well known and respected within the IEEE. He is a Fellow of the IEEE and a member of a number of its technical societies, with excellent credentials in IEEE and many other technical organizations.

unlicensed devices and television receivers, operating simultaneously with any other already-allowed devices and services in the TV band.

We appreciate the opportunity to provide these reply comments to the Commission.

Respectfully submitted,

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